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Citation: Dow, Andy, Vines, John, Lowe, Toby, Comber, Rob and Wilson, Rob (2017) What Happens to Digital Feedback?: Studying the Use of a Feedback Capture Platform by Care Organisations. In: Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems: May 6-11, 2017, Denver, CO, USA. Association for Computing Machinery, New York, pp. 5813-5825. ISBN 9781450346559

Published by: Association for Computing Machinery

URL: <https://doi.org/10.1145/3025453.3025943>
<<https://doi.org/10.1145/3025453.3025943>>

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What Happens to Digital Feedback?: Studying the Use of a Feedback Capture Platform by Care Organisations

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ABSTRACT

In this paper we report on a four-month long field trial of ThoughtCloud, a feedback collection platform that allows people to leave ratings and audio or video responses to simple prompts. ThoughtCloud was trialled with four organisations providing care services for people with disabilities. We conducted interviews with staff and volunteers that used ThoughtCloud before, during and after its deployment, and workshops with service users and staff. While the collection of feedback was high, only one organisation regularly reviewed and responded to collected opinions. Furthermore, tensions arose around data access and sharing, and the mismatch of values between ‘giving voice’ and the capacity for staff to engage in feedback practices. We contribute insights into the challenges faced in using novel technologies in resource constrained organisations, and discuss opportunities for designs that give greater agency to service users to engage those that care for them in reflecting and responding to their opinions.

Author Keywords

Feedback; social care; health; democracy.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous;

INTRODUCTION

The feeding back of opinions and experiences of service users to those who provide services is an integral feature of most service evaluation, improvement and commissioning processes. In addition, in certain domains—such as those where vulnerable or marginalised groups receive support for their health and care—the collection and response to feedback is also a mechanism whereby people can have their voices heard [41]. The desire to give voice to service users and actively involve them in the design of new

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CHI 2017, May 06–11, 2017, Denver, CO, USA
ACM 978-1-4503-4655-9/17/05.
<http://dx.doi.org/10.1145/3025453.3025943>

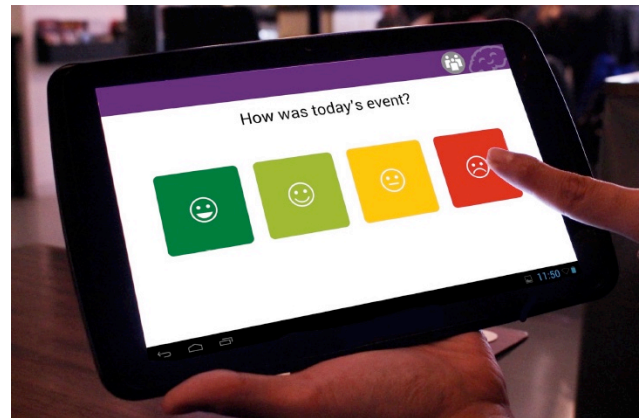


Figure 1. The ThoughtCloud feedback collection system.

services is often enshrined in the mission statements of care providers, especially those operating in community and not-for-profit contexts. Furthermore, in the United Kingdom (UK), government policy stipulates that those who access and use health and care services take a central role in determining the form that service provision should take [22]. Yet, despite this, many voices are still excluded [33] and, while feedback is routinely collected, it is often done so in a tokenistic fashion instead of contributing to meaningful user participation in service innovation [2].

The study of innovative digital technologies for capturing opinion is well established within HCI literature [8,13,20,21,27,37,42]. We build on this growing area of research, as well as extending our own prior work [14], to explore, in greater depth, the use practices emerging around an iterated version of an existing system, over a much longer period of time in a more diverse range of settings—investigating the roles simple feedback technologies play in care organisations. Our research was centered around a four-month field trial of ThoughtCloud, a tablet-based application that allows care staff to set prompts and questions which are then responded to via likerts and short audio and video recordings. This new version of ThoughtCloud also supported organisation staff to review and annotate collected feedback, respond to specific instances of feedback, and to post approved content to a public feed. Staff and volunteers at four care organisations were introduced to ThoughtCloud and used it to complement or replace traditional feedback gathering

methods. Staff and service users were engaged throughout the study to understand how the technology aligned with organisational practices, as well as to study the practices that evolved around the ongoing use of ThoughtCloud. We offer two contributions to HCI discourse on designing for non-profit organisations in a care context. First, we build on prior work on feedback technologies to highlight challenges associated with aligning these systems with the values of non-profits driven by socially responsible principles. Second, we offer a number of implications for designing in this context going forward, emphasising issues related to embedding technologies within existing practices, and the ways these technologies relate to wider policy issues.

BACKGROUND

It is increasingly common for health and care service users to be consulted on and take a central role in the design, development and, more recently, the commissioning of services [17]. While critical to many private and commercial endeavours, the active involvement of service users in such processes has become a key feature of health and care sectors, especially in nations where such services are publically funded and state governed [35]. In the UK, where this research has been conducted, government policy stipulates that those who regularly use certain care and health services take a central role in determining the form that service provision should take [22]. Since 2007 the greater involvement both of the service user and the general public in service provision within the UK National Health Service [2] has been enshrined in policy as a duty for statutory bodies, and includes the gathering of views on local government social care services [22]. More recent acts of parliament—such as The Care Act and the Children and Families Act—have stipulated that information on local service provision should not only be collected in an easily accessible, up-to-date repository, but that some form of feedback should be collected around this information as well [23,24].

The UK is not alone in privileging service users as a valuable resource for consultation in the delivery of care planning, with a similar ethos found in Australia and advocated for by the World Health Organisation [5]. However, while official rhetoric identifies “patients as users whose voices should be listened to in order to ensure responsive services” [2:xxiii], in reality there is a lack of direction around how this might practically be achieved. This has led, in the UK at least, to an environment where, “despite this supportive policy context, progress to achieve greater involvement is patchy and slow and often concentrates at the lowest levels of involvement” [34:1].

The Ritual of Feedback in the Not-for-Profit Care Sector

Feedback, which we define as the collection of and responding to opinions and views of service users, can provide an opportunity for people to have their voices heard [41]. However, it has been argued that feedback is often used perfunctorily rather than contributing to meaningful

user participation [2]. Tritter [40] draws a distinction between indirect involvement; where professionals gather information from the public, and direct involvement; where service users take an active role in decision making, with the former characterising the majority of involvement and the latter as the more desirable [1]. The latter is reflected in care organisations—especially those oriented towards the provision of care in the not-for-profit or community sector—where there is often a commitment to giving those citizens (who are vulnerable or marginalised) a voice [15]. Many such organisations are founded on and driven by values stemming from social justice in disability activism [35], demonstrating a commitment to lobbying for direct policy changes that ensure equality of access and opportunity. At the same time these organisations are often committed to a philosophy of being user-led, which in some cases means that service users are committee or board members, guiding service provision accordingly.

While it is often desired, direct participation can be challenging in settings where many service users have a physical or learning disability or significant care needs [15]. Furthermore, increasingly such services, even if charitable and not-for-profit in nature, operate within a competitive environment where many organisations are experiencing cuts to funding. Considering the often highly limited human and financial resources of such organisations [7], and their need to evidence metricised outcomes to report to and attract funders, indirect forms of engagement tend to take prominence [9,16], as these produce quantitative ‘evidence’ which commissioners demand [31]. However, such forms of engagement—like surveys, questionnaires, or interviews—can be quite problematic and exclusionary for many of the populations that rely on and use such services [19,36]. As such, despite the values of such organisations, limited time, resources and the need to acquire funds can lead to tokenistic involvement or the giving of feedback by a proxy [29].

HCI and the Care Sector

The care sector and care relationships have become increasingly important areas of enquiry in HCI in recent years. Prior work has extensively studied the role of technology in supporting new practices for informal (e.g. [48]) and formal (e.g. [38]) carers and to support interactions and relationships between carers and those in receipt of care (e.g. [47,49]). However, relatively little work has examined the issues of user voice and participation in these settings. An exception to this is Hook et al. [25], who investigated the role of video as a medium for capturing experiences of community care project events. They worked with individuals such as young people at risk of problem outcomes, unemployed adults, people with special educational needs, and people with health conditions to create video documentation of project activities to communicate what individuals gained from their involvement in the project. Hook et al. highlight how simple digital technologies can be used to evidence the

invisible work that goes on in social care spaces, and highlight how user generated media can be used as part of service evaluation processes with funding agencies.

Our own prior work on the ThoughtCloud system [14] built on the research of Hook et al. We discuss this prior work, which this paper extends, in the following section.

PRIOR WORK ON THOUGHTCLOUD

ThoughtCloud is a simple, lightweight system designed for collecting feedback from people using an application (app) running on an Android tablet. It was designed with a not-for-profit care organisation to support and extend existing feedback practices. The app poses questions, defined by an organisation, allowing people to respond via simple likert ratings and audio or video messages. The tablet can be set-up at events in a range of ways, including being placed on a stand at 'entrance and exit' points, by being handed around to people or being placed in private spaces. The ThoughtCloud system was designed with the requirements of resource limited not-for-profit organisations in mind. The full design process, and the initial four week long field trials of the system, are reported in detail elsewhere [14].

ThoughtCloud was intended to respond to issues around the noted lack of capacity to collect feedback and the inappropriateness of traditional methods for certain populations of care service users. In our prior work, we reported on a short field trial whereby the system was used by two organisations working with people with disabilities and cognitive impairments. Findings highlighted enthusiasm for the technology, from service users and staff, for the simple way it enabled people to 'talk to' those who organise and oversee events, projects and services. It was found that the system made explicit practices of mediating feedback (by showing this in audio or video clips) and provided ways to observe individual service user gains over time. The study also highlighted the importance of timely responses to feedback, especially that of a sensitive nature, and defining specific roles and responsibilities for staff who administer, review and support others in the use of the system. Finally, the trials highlighted the importance of sharing feedback among staff and volunteers.

The study reported here extends this prior work, by investigating the use of a redesigned version of ThoughtCloud across a longer period of time (twelve weeks rather than four) and in collaboration with a larger number of diverse care organisations (four rather than two). There was therefore the opportunity to explore its use at many more sessions, in a variety of settings, examining in greater detail how ThoughtCloud supports existing and emerging practices of collecting and responding to feedback. In the next section we detail the key design decisions followed as the system was redesigned.

Redesigning ThoughtCloud

An initial priority was to develop features that facilitated the use of ThoughtCloud without the support of the

research team. For the tablet app this focused on including functionality for system admins to create new feedback events, which would suggest default settings for questions to pose to users. An event editing panel was also introduced, allowing for a more flexible system that can be reconfigured while events were underway. Similarly, the application was redesigned to work offline, allowing it to be more portable. This was complimented with the introduction of a manual sync feature, allowing data collected on a tablet to be synced to a remote server when a Wi-Fi connection was available.

A further focus of redevelopment was on creating a website where feedback collected could be reviewed, shared with other staff and volunteers and, if appropriate, published online. Within the administration panel, a configuration panel was added that allowed users to create an account for their specific organisation, making them the 'system admin'. This had tiered access functionality, along with the ability to manage who else had access to ThoughtCloud data and the visibility of content. This was identified as important in the previous study since the potential for service users to leave sensitive information was observed. Managers therefore retained the power to grant access to others working in the organisation. It had also been identified that sharing with other staff members and volunteers within the organisation was desirable. This was made possible through admins being able to create accounts with a lower level of access to the system.

New ways of sorting and searching for feedback were created too: recurring events could be sorted by date and type, while a flexible tagging feature was added for video and audio feedback. These features, combined with secure data transfer between clients, servers and media repositories ensured that ThoughtCloud was a robust system, that was both usable and secure.

STUDY DESIGN

Since our earlier work highlighted the potential for systems like ThoughtCloud to support new and meaningful feedback practices in care organisations, we wished to study its use over a more extensive period of time. Furthermore, we were motivated to study how ThoughtCloud might be used across a more diverse range of care organisations operating at different scales and providing different types of services.

Four organisations took part in this study: 1) *SmartSkills* (SS): providing advocacy, referral, befriending services and leisure activities for people with various disabilities, and ages ranging from young people in their late teens to older adults; 2) *Bright Times* (BT), providing leisure and social activities to people with learning disabilities, aged from mid 30s to late 60s; 3) *Young People First* (YPF), working with young people (up to 25 years old) in care and with special educational needs; and 4) *Horizons* (H), a new organisation working in care homes with people with dementia. Each of these organisations were previously aware of our work with

Organisation	Staff & Volunteers	No. of Events	Ratings (Vids/Auds)	Website Logins
Smart Skills	35	41	169 (47/65)	12
Bright Times	4	15	79 (36/18)	4
Young People First	145	5	39 (5/6)	2
Horizons	1	27	92 (4/67)	17
Total	185	88	379 (92/156)	35

Table 1 Overview of organisations and their system use

ThoughtCloud, recognised feedback as vital to their everyday work with vulnerable service users, and had approached the research team with a request to use ThoughtCloud. Each of the organisations were of a different size (see Table 1), with most making use of volunteers in some capacity, ranging from nearly 150 staff and volunteers (TPF) to one person operations (H). Furthermore, the larger organisations worked primarily out of a central building where the majority of their activities and events take place (SS and YPF), and the smaller organisations (BT and H) conducted outdoor activities or ran sessions in different locations.

A primary contact at each organisation was identified to act as the system's administrator (hereafter system admin), taking responsibility for managing their organisation's account. They were taken through the steps of creating an account for their organisation on the ThoughtCloud website, as well as the relevant aspects of the system, including how to: use the tablet application; create an account and userID; setting passwords for access; and how to configure feedback collection events and review and share feedback with additional users. At this initial meeting events and activities were identified where the system would be used to collect feedback. Visits to groups using the system were arranged so the purpose of the system could be explained. This also presented an opportunity to observe the use of the tablet application by the organisation. Throughout the study, the research team checked collected data remotely, with permission, for sensitive submissions that may need to be flagged.

Qualitative Data Collection

Semi-structured interviews were planned and conducted at key stages of the study to understand more about the organisations and their use of ThoughtCloud. Initial interviews conducted prior to the trial starting were used to explore attitudes to feedback, as well as to get a clearer idea of how feedback was currently collected, how it was reviewed and used within the organisation and how they saw ThoughtCloud fitting into those processes. Following deployment, after two-weeks a member of the research team contacted the system admins individually to ensure that there were no problems with the system, to remind them to sync their tablets regularly and to log in to ensure

that no data was lost. Further in-person interviews were conducted eight weeks into the trial, with questions based on observations of system use up until that point. At this stage an additional member of staff at one organisation, (SS), was identified as a 'champion' of the system and was interviewed to explore their motivations and experiences using it to collect feedback. Finally, exit interviews were conducted to review the totality of the system's use, exploring successes and ideas for future development. In total 15 interviews lasting between 30 minutes and 1hr 10mins were conducted with six different individuals, each paid members of staff from across the four organisations.

Two two-hour long workshops were also conducted following the end of the trial. The first was with 10 service users with a variety of learning disabilities who had given feedback using the system and made use of services from (SS) and (BT). This workshop involved a paper based feedback giving exercise, exploring service user understanding of feedback by creating 'feedback letters', and deciding to whom and about what they would give feedback on. The second workshop was with 8 staff and volunteers representing all participating organisations. Participants were asked to complete workbooks where they responded to feedback prompts drawn from example feedback collected from the trial. This explored both how feedback should be treated once collected using the current system, and how staff members would respond to provocative versions of a future redesign of ThoughtCloud.

System Data Collection

System use data was obtained from recording user interactions with the ThoughtCloud website, including: number of logins to the website; number of additional user accounts created; number of events created; amount of feedback collected; sharing or 'using' feedback; number of times frequency data was synchronised from the tablet application to the ThoughtCloud server. This data was analysed and used to determine interview questions, in order to explore emerging use practices and address barriers to using the system that were suggested by the use data.

Data Analysis

Given the nature of the data collected, we utilised a qualitative approach to incorporate the different data collection methods into one corpus comprising: interviews; field notes and workshops. All interviews and workshops were audio recorded and then transcribed. Thematic analysis [6] was used to examine the data collected from these disparate sources. Data was systematically summarised by textual codes and then into themes, guided by field notes collected at the participating organisations and the observed use of the system. These were further refined into the final themes, which we present in the following sections. Both participants and organisations are referred to using pseudonyms in line with the institutional ethics review procedure followed when designing the study.



Figure 2. Finding opportunities to use ThoughtCloud in the café of an exhibition centre at an annual event.

FINDINGS

Feedback was collected at a total of 88 events across the four participating organisations. It was used at recurring activities as well as one-off and annual events (Figure 2) attended by heterogeneous populations of service users: the youngest being 10 years old and having a behaviour disorder and the oldest being 95 with cognitive impairment. In most cases, service users were requested to leave feedback by a member of organisation staff or a volunteer and supervised as they did so. A total of 379 ratings were left by users across the entirety of the field trial. On 248 occasions users left an additional recorded message: 92 video and 156 audio comments (see Table 1 for summary).

The use of the tablet application was broadly consistent across all organisations, with each appearing committed to maximising opportunities for feedback collection. For the majority of those staff members and volunteers who used ThoughtCloud, their engagement with it was restricted to the tablet application to collect feedback. By contrast there was comparatively little engagement with the ThoughtCloud website where feedback collected can be reviewed. Overall, 35 logins were recorded across all of the organisations during the field trials. (YPF) recorded the fewest examples, with only two logins across the length of the study. Notably, it was the smallest organisation, (H), which reviewed feedback the most (17 logins, 49% total logins). Use data suggests certain feedback wasn't checked on regularly or in a timely manner.

In the following, we report the themes from our analysis of the data. For the purposes of clarity we have organised these themes into two sections: i) support for our prior work; and ii) novel findings that extend our prior work on ThoughtCloud. Through these sections we combine both transcribed interview and workshop data to highlight the differing practices and processes that evolved around the use of the ThoughtCloud system.

Supporting Prior Work

Initial motivations for collecting feedback

For each of the participating organisations ThoughtCloud was seen as having practical utility. It was seen as a way of

'evidencing' practice for funding: *"People give us money. They want to know that we are spending the money wisely and [...] it is having some kind of beneficial effect."* (Robbie). It also offered an opportunity to collect ideas to develop new services or to refine and replace existing ones: *"getting that feedback I guess to help us think about what we're doing and how we're doing it."* (Steve). For (H), which was a new organisation, feedback gathered by ThoughtCloud provided evidence to demonstrate their development: *"I want it to be more empirically-based, much more thorough, much more appropriate and effective."* (David). By all, ThoughtCloud was seen to be practical and accessible, which is particularly important for the populations that each of the organisations we worked with served: *"These are people with learning disabilities and anecdotally they can tell you stuff but if you want to measure stuff it is a little bit more difficult."* (Robbie) This is consistent with findings from our prior work in that our participating organisations were motivated by similar goals for feedback collection and use.

Training up and promoting use

As stated, our main contacts had the ThoughtCloud system demonstrated to them in order for them to take a role as system admins. At the three larger organisations it was intended that these admins would introduce the tablet app to colleagues so they could use it too. At (BT) and (YPF) there was a consensus that the feedback collection component of the system was easy to pick up and learn: *"That's the beauty of it, it is so straightforward."* (Robbie). At (YPF) in particular, an approach was taken where staff members were given short demonstrations of how to use the system: *"I've shown someone who facilitates one of the groups how to use it and that was fine. [...] everyone's picked it up pretty quickly."* (Hannah). However, as is common of community sector organisations, there was a huge diversity of skills and expertise when it came to using digital technologies. This was a particular issue at (SS), where one system admin (Alice) primarily explained how to use the system via emails sent to staff and volunteers: *"It wasn't being pushed [...] Alice has sent quite a few emails suggesting people use it and saying why it's important."* (Grace). As such, initially this organisation struggled integrating the new version of ThoughtCloud into daily practices: *"It was more just a suggestion it's there"* (Grace). There was an emphasis on asking and telling people to use ThoughtCloud, but less on actively demonstrating and promoting its use. This was underlined by another system admin reflecting that this was too passive: *"[It's] not enough. 'Good morning. How are you? Are you using ThoughtCloud today?' should be my morning greeting to all of my colleagues"* (Steve). This supports the prior findings that ThoughtCloud was both suited to its purpose and learnable, but suggests consideration be paid to how it could be more meaningfully appropriated in a context with less support from the research team.

Using ThoughtCloud at sessions and events

Although ThoughtCloud was designed with a specific use case in mind, operating on a tablet stand after events, as per our prior study, organisations were encouraged to adapt it

as they saw fit. For example, for (YPF) it made sense to place the tablet on a stand in a kitchen where a drop-in session was being held for young people. At other times the tablet was taken along to outings for the youth participation group, where it was more practical to pass the tablet between people: *"It's good to have the stand, because I think that worked really well with the drop-in. I think if I had a stand with my group, they wouldn't probably figure it was there."* (Hannah). For (SS), however, operating out of a large building with multiple rooms on different floors, attempts were made to think through systemising the tablet's deployment: *"Maybe people who set up the rooms for a room booking can always put ThoughtCloud in the middle of the room ... So, yes, you get the tables, the tea, the coffee, and ThoughtCloud."* (Steve)

For (BT) their services comprise a mix of outdoor activities such as gardening and cycling as well as in door group activities such as yoga or carpet bowls. On one occasion, the tablet on the stand had not been correctly set to feedback capture mode and the screen had timed out and shut off. When asked about this Robbie reflected: *"I prefer using it, holding it myself [...] I'm making sure their head's in the middle of the screen and I can prompt."* (Robbie) David from (H) had a similar preference, which he felt was more suited to his clients who were mostly people with dementia, *"Just getting them familiar with holding it and passing it around and not worrying about it at all."*

It should also be noted that, by far, the majority of the recorded feedback was overwhelmingly positive, with people praising the organisation collecting the feedback or, in many cases, praising specific individuals working for those organisations. In the case of (BT) where collection was supervised by Robbie, service users would at times address the camera using his name, as though they were speaking to him directly. It is possible to speculate that the presence of organisation staff or volunteers when giving feedback somewhat skewed the nature of the feedback services provided; however, we should note that the video and audio recordings themselves act as a means for evidencing situations where those giving feedback are being strongly guided by another person. Again, this echoes the findings of our prior work where veracity and transparency, especially of video feedback, was greatly appreciated.

Extending Prior Work

The values of care organisations and practitioners

Significantly, the participating organisations were primarily driven to collect feedback as a result of their underlying "user-led" values: *"As a user-led organisation, the view of disabled people, families and carers are important to us. We're driven by our values."* (Steve). All of the organisations, in different ways, were dedicated to providing opportunities for vulnerable or marginalised people to feel listened to, *"Giving people a voice ... it's central to the whole philosophy of the organisation,"* (Alice); *"If people are listening to you, your sense of self and your confidence goes up."* (David). Therefore,

there was a real sense that the collection of thoughts and opinion would enable disenfranchised groups to participate in civic life and be treated as an equal citizen:

"If disempowered people have had their voices taken away from them they can certainly fight for it back themselves [...] other folks find that really difficult to do independently [...] we're all about amplifying the voice of disabled people." (Steve)

The significance of these values to those working in these settings was particularly evident when approximately midway through the trial at (SS) one person started to promote ThoughtCloud's use despite having no structured training from the organisation. Grace had *"worked it out for herself."* (Grace) This enabled her to show another staff member how to use the system as well. On another occasion she introduced it to a volunteer who ran a regular participation group, enabling them to use it after their sessions. She also identified new opportunities where it could be used, sometimes at activities with which she had no involvement or limited contact. Reflecting on this, she explained that as a trainee social worker she understood the value of feedback and the importance of listening to service users: *"For me personally it's to develop practice, that's something that's trained in."* (Grace). For her, the system spoke to personal and professional values around motivations to collect feedback.

Making the most of every opportunity

Although by the end of the trial feedback was being collected regularly across three of the organisations, staff would frequently refer to *"missed opportunities"*. At (SS) an expectation had emerged of almost continual use of ThoughtCloud borne out of the need to evidence the operations of the organisation. This led to disappointment around the actual volume that was being collected: *"[It's] not as much as we'd like."* (Steve) However, as noted earlier, with no clear strategy for integrating the system into practices, at times it was forgotten: *"I had forgotten to bring it downstairs"* (Grace).

Similar concerns were raised at the other organisations. At (BT) the use of ThoughtCloud was often *"tacked on"* (Robbie) at the end of a session or event. A difficulty both (BT) and (H) faced was that sessions would be ran by one person and, having a number of different things to manage at once, would be easily forgotten. On one occasion Robbie took ThoughtCloud on a cycling trip to capture feedback throughout the day: *"it wasn't actually till the end of the day I went into me bag: 'Damn it's there'"* (Robbie). Interestingly, these missed opportunities sometimes led to service users being asked to do a 'second take', repeating an opinion that they had expressed in passing earlier for the camera to ensure that it was captured:

"We did a ride leader training the other day and one of our members finished the ride leader training and said: 'This is the best thing, it's really good.' I said: [...] 'Let's do this on the ThoughtCloud' So, he did." (Robbie)

At (YPF) the administrator struggled to find opportunities where she was able use the tablet. She attempted to introduce it into sessions with other groups, run by other staff members and volunteers and, after a few limited and frustrating attempts, abandoned trying:

"It's been a little bit frustrating in the sense that I haven't had a lot of opportunities to use it myself ... in terms of the drop-ins, maybe it needs a central person like Barry to promote it with maybe the four staff that would be involved and potentially accessing it." (Hannah)

For this organisation their feedback processes were stringently defined and adhered to: *"It's difficult. You know, and it does take time for that too you've got to chat to parents to explain to them what it is"* (Hannah). As a result having concerns around safeguarding for all of those under their care was commonplace and perhaps understandably fostered a natural suspicion of recording technology brought into such a regulated context.

It was notable, however, that while the organisation staff themselves were concerned about forgetting to collect feedback, over time service users still began complaining about having to give feedback time and time again. For example, Grace reported that a group she brought the tablet to complained: *"Oh doing this again? Did you not get enough the last time?"* (Grace). This complicates the notion of continual feedback collection reinforced by management at (SS), highlighting how such practices can cause a kind of 'feedback fatigue'. Further, it highlights a potential lack of value placed in feedback on the side of some service users—or at least a lack of knowledge of the importance placed on feedback by those organisations that rely on a mix of government contracts and private funding bids. Indeed from the workshop with service users, a picture emerged of feedback and opinion giving as opaque terms. This was acknowledged by Susan, observing that educating service users about this could be an important part of feedback processes: *"[if] they know that they're being heard and they're more likely to leave more feedback in the future, leading to your critical feedback, maybe?"* (Susan).

Challenges with administration

As noted earlier, while all of the organisations engaged in considerable amounts of feedback collection, there was a relatively limited amount of engagement with the ThoughtCloud website's admin panel by some of them. It became evident to us at an early stage that feedback was not being reviewed. This was further evidenced at the mid-point interviews where admins attempted to login and most struggled to remember UserIDs and passwords. Passwords had either been forgotten or written in notebooks or on scraps of paper left lying around in offices: *"I'm just trying to remember what my password was. I think it might be in my other notebook."* (Hannah). While the research team resolved these access difficulties, engagement with the admin panel was not seen to increase across the remainder of the study, and in fact most logins correspond with interviews being conducted by the researcher where the participant was

explicitly instructed to login. In one example, (YPF), this accounts for all recorded system logins. Perhaps unsurprisingly the only organisation that did not require a new password was also that which used the review system the most, (H), since they were logging in on a regular basis to review feedback.

For those who didn't regularly use the admin panel, they had forgotten how to use it and asked to be reminded of how to complete simple operations. At (SS), Alice said, *"It's not routine and I'm IT phobic."* For Steve, however, he reflected about this lack of engagement, *"I'm not yet plugged into the value of doing it [...] Before I do it the first time, that hasn't happened, I suspect."* (Steve). As such, although there was a strong belief at (SS) that ThoughtCloud should be used continuously to collect feedback, it was clearly challenging to embed the reviewing of this feedback into daily practices and routines, *"We haven't quite embedded using ThoughtCloud as a routine part of everything we do [...] I'm not quite sure what that's for, but that is absolutely a kind of cultural thing again, isn't it?"* (Steve). In part, this suggests some of the organisations were unsure of the value of ThoughtCloud as a means for giving voice to their service users. The standard practice at both (SS) and (BT) was to use feedback as a means to promote or evidence their work for funding bodies and proposals. As Steve himself noted, it was desirable to *"hoover up feedback and drop it into [...] board meeting reports and end-of-year reports, that sort of thing."* (Steve). Robbie from (BT) observed that he rarely checked in to review feedback because he's *"always there when they give it"*, referring back to his preferred practice of recording videos with the people who take part in his activities. However, the lack of reviewing of feedback was more problematic at (SS) due to its size, where multiple people were using the system, where it was more frequent for people to respond to questions on their own, and where none of the staff that regularly collected feedback had access to the administration panel. Reflecting on the overall lack of engagement, Alice suggested that perhaps *"it should be in somebody's job description"* to not just use ThoughtCloud at sessions but to regularly log in and checking what people say. Steve further suggested, *"Somebody should have an hour a week where they log in and review stuff."* (Steve).

Reviewing and using feedback

Despite the above difficulties, feedback collected was still valued. Perhaps unsurprisingly, the organisation evidencing the most logins was the newest organisation that was still developing the services that they provided. David from (H) used the videos collected via ThoughtCloud to support his, *"ongoing reflections"* on his practice. He explained how he would log in to ThoughtCloud's website after sessions, and expend a great amount of time and effort manually transcribing each of the recordings. Doing this, he engaged in a close viewing of the data and frequently reflected on how he acts. In one case, he stated:

"I wasn't giving any energy [in a session]. Physically I wasn't standing up, I wasn't charging around [...]. Archie says, 'What you need to do David is put more energy,' So really powerful feedback, thanks to that, from Archie, telling me what I should be doing." (David)

As well as creating evidence to communicate how he was personally progressing, he also considered his transcribed notes as evidence for the regulator of health and social care: *"you need to get these ideas out and down [on paper] and a lot of people have said that from the care quality commission."* (David). At (BT) and (SS) feedback was used to get further funding, with transcribed audio feedback included as evidence in an application for funding for social activities: *"We've absolutely used it for funding for [a leisure group] at present."* (Steve). In terms of informally acquiring resources, following a session of cycling training, Robbie (BT) asked if there was a way to share feedback with a collaborating organisation to show them how much their contribution was valued:

"To pay back to people who have done stuff. I think that would be nice. To be able to turn round and say: 'Look we've got video footage of people saying how wonderful you are and your course.' And they're obviously very excited about that." (Robbie)

Robbie's comments here highlight how there was a desire to share feedback more widely beyond the organisation's boundary; however, as we note in the following theme, the sharing of feedback within and beyond organisations, and even beyond just key members of staff, was highly contested by some.

Complexities around sharing feedback

While in our previous studies, the sharing of feedback—within the organisation, with funders, and with the wider public—was seen to be important, this rarely happened across these longer studies. This was despite ThoughtCloud being redesigned to handle the sharing of content between designated staff and the publishing certain feedback online. This could, in part, be linked with concerns around the sensitivity of the data. Furthermore, in some cases, as at (SS), reviewing of feedback was mostly imagined to be an individual practice conducted by the staff running and overseeing an event. Alice explained how information is shared within (SS): *"confidentiality, in organisations like this, is on a need-to-know basis [...] it shouldn't be shared between one person and others in the team, unless they need to know."* (Alice). Alice further noted that, in its current form ThoughtCloud didn't offer a fine grain enough set of access permissions to allow for individuals to see some data and not others, *"So there's a choice of all or nothing, really?"* (Alice). As a result, specific people act as a barrier to sharing feedback; i.e., they don't devolve responsibility, perhaps because they don't realise they have to: *"To be honest, I don't think we have used it other than just informing Steve and I."* (Alice). Confronted with these barriers to staff members reviewing the feedback they collect—i.e., admins not giving others access rights—Steve reflected that such limits on internal data sharing be revoked: *"Why should*

Grace be worried that Janice can see what the people on the S&S course thought about the course that's been run by Grace? Why should that be an issue?" (Steve).

While the value of sharing feedback with staff and volunteers was well understood, reticence to share publically remained. For those organisations working with people with cognitive impairments and young people, this was felt particularly acutely. At (H) the idea of sharing recorded feedback publically was treated cautiously: *"We could do it anonymously"*. For (YPF) the issue was how such a feature would enmesh with existing safeguarding policies: *"We'd have to get consent from the parents [...] We'd have to be quite careful about having that online [...] We've got to follow our data protection policy."* (Hannah).

Although the participating organisations were anxious about having feedback posted online, there was also a worry that there was a lack of "giving feedback" on the feedback. Robbie from (BT) said he tried to make sure those who give feedback get a chance to view the videos they create: *"What you will find, especially if people leave a video, they will want to watch it"* (Robbie). Alice at (SS) went further: *"morally, you should respond. If they give their views and nobody has heard that's worse"* (Alice). Here Alice demonstrates an awareness that the act of collecting feedback itself comes with a moral obligation to respond; yet clearly there is confusion about how best to do this. Indeed, our engagements with service users highlighted how there was a general lack of awareness of what was happening with the 'messages' they were recording, other than them being looked after by the person running the session. It was further acknowledged by some of the organisations that even if they were to publish the feedback collected, part of the problem would be the limitations for some of their service users in terms of access to online resources. The (SS) team thought around the problem by suggesting that they have a display permanently situated on their premises: *"In terms of the reception area, it would be great [...] even if it was just a laptop sized screen that people could notice."* (Alice). However, for (YPF) this would still remain problematic, with consent being foregrounded as a significant issue: *"We'd have to get consent from parents. It's not as simple as just saying yes from our point of view."* (Hannah).

DISCUSSION

This study highlights a number of challenges facing community care organisations embedding digital technology into established feedback practices, particularly regarding issues identified with the reviewing and actioning of service user opinion. Volda and colleagues [28,43–46] alert us to how community and not-for-profit organisations are deeply complex and offer many challenges for technology design. Through real-world use and non-use [3,4] of ThoughtCloud, we observed how technical literacy is a very clear, real-world barrier and how the chaotic nature of care environments often meant that ThoughtCloud would not be engaged with. We also experienced being

drawn into the infrastructure, as has been observed by others [11,26], of not-for-profit care ourselves. As such, these are clearly highly dynamic contexts for technology design, where the situation of use and the primary users are continually shifting.

One reaction to this might be, as suggested by Steve, to engage in more top-down policing of the use of ThoughtCloud. However, this seems inappropriate for resource limited environments where most staff and volunteers are simply trying their best to care for people. Instead, we see the value in exploring the ways systems like ThoughtCloud might support more flexible and meaningful practices of promoting service user voice that align with the values of care organisations like those in our study. In the following closing sections of the paper, we discuss some opportunities and challenges associated with this approach.

Mismatching Values and Practices

One of the motivations for the organisations we worked with in using ThoughtCloud was that it was seen to speak directly to their values around giving their service users a voice. However, in practice we observed that the way in which ThoughtCloud was used contradicted these values. Certain members of the participating organisations still went to great lengths to collect feedback using ThoughtCloud, but in many of these instances the feedback they collected was not reviewed, explicitly responded to, or used in any way. Indeed, there was a great emphasis on the *“hoovering up of feedback”* and prioritising this as evidence for funding bids or to gain further resource from other organisations. Therefore, while the values underpinning participation in the study were around giving those with care needs an opportunity to be heard, it was rare to see this be actioned or accounted for. At best, this is disappointing. At worst, given the findings of our prior work [14], it's worrying that critical comments or the revealing of personal safety issues via ThoughtCloud might be left unaccounted for by organisational staff.

While low-level technical problems, such as those surrounding lost passwords, caused some problems, we found these to be attributable to a lack of engagement with the web based part of the system rather than an indication of issues relating to the system's design (they were quickly and easily resolved and often accompanied by apologies for not having had time to take a look). We acknowledge, however, that there is potential for the system to do more to hold admins to account, especially in relation to feedback that is not being viewed or actioned. For example, it would be a trivial matter for the system to report, perhaps via email, when new feedback has been uploaded, prompting system admins to review it or take action. Similarly, the system might enquire what action is to be taken regarding viewed feedback and suggest ways in which to progress the feedback. Of course, this might add further work to already overflowing inboxes in organisations where the priority is to answer directly to a service user. A balance may be

found in the system reporting a weekly digest summarising the amount of feedback collected that week and, more crucially, reminding them regarding that which has not been responded to or actioned.

As we observed, only one organisation logged in to review collected feedback regularly. The others were unambiguous about their use of feedback as a means to provide evidence to funding bodies, with one in particular (BT) enthusiastic about their participation with the research project for its demonstration that they were engaged in ‘novel monitoring’ practices. Our study then highlights an attitude to feedback which is concerned with demonstrating the efficacy of existing practice rather than using that data to reflect on, and improve practice. This reflects literature on the public and voluntary sector, that highlights how outcome-based funding practices, prevalent in the not-for-profit sector, foster particular behaviours, where: “workers become focused on how to produce the required performance information.” [31:5] The use practices we observed are examples of problems driven by structural issues relating to feedback practices. These structural issues encourage organisations to demonstrate user engagement in ways that appear to be legitimate but in reality affirm existing indirect and tokenistic approaches to involving users in service appraisal and (re)design. In executing user engagement in this manner, organisations then lose sight of the potential for service users to offer valuable input and opinion that might impact the services they provide.

An example of best practice, in relation to the existing system's use, was evidenced by Grace using ThoughtCloud to record herself. This had a two-fold benefit; first, it simply enabled her to demonstrate how it works and build confidence in using it to leave feedback; second, her practice of using ThoughtCloud on herself demonstrated its wider utility as a tool for reflection-on-practice. This sort of critical self-reflective practice has been shown to be invaluable in social work literature [18,39] and was a practice that David also participated in during his use of ThoughtCloud. Furthermore, it is something that many care and charitable organisations increasingly have to demonstrate engagement with and learning around [35]. Therefore, if the purpose of feedback in organisations like these is to support reflection on user experiences of services to iterate and refine, then building such technologies explicitly into entire practices of individual and group reflection on and documentation of work seems entirely sensible [10,32]; creating a ‘culture of feedback’ beneficial to the confidence and efficacy of staff and volunteers, which could then be passed on to service users themselves.

Feedback Sharing, Exchanging and Making Visible

A further set of issues from our study relate to how the data collected using ThoughtCloud can be operationalised, making the work of the organisation more visible, both to the populations served and to the wider community. Some of the reasons why the feedback was not engaged with once

collected was due to two organisations being single person operations; but others were because of problems with access levels within organisations and a general lack of value seen in the current ways ThoughtCloud ‘published’ feedback online. The former issue demonstrates the inappropriateness of traditional access management methods, such as those associated with modern CMS systems, in this setting, and prompts creative thinking regarding how recorded information could be quickly and safely shared, both with service users and the relevant organisation members, to ensure maximum utility.

The latter issue of publishing feedback was particularly divisive with organisations with service users that did not have access to the web at home; therefore, they simply didn’t see “*the point*”. While publishing feedback online was seen by us as a way of supporting engagement with external parties (and indeed friends, family and carers of people who use services) this was a clear oversight in the design that impeded engagement. However, through this oversight we learned that there was a desire for having feedback be ‘more visible’ both within organisations and between organisations they collaborated with. Elsewhere it has been shown that data presentation techniques have great value in fostering communication within local communities [12,27], as such, we might imagine a future version of ThoughtCloud that publically publishes use statistics showing, not just that feedback is being collected, but that it is being reviewed, responded to and meaningfully incorporated into service provision. Alternatively, organisations like (SS) and (YPF) could have simple, networked displays in their facilities where feedback, or summaries of feedback and how the organisation will respond, can be ‘pushed to’ and made visible.

While using public and semi-public displays might make the collection and responding to feedback more visible, it doesn’t deal with issues of acquiring consent to share media of individuals—a particular issue for two of our participating organisations who have safeguarding responsibilities for their service users. This raises questions of how safeguarding and consent should be appropriately managed, a problem with digital systems generally [30], but one which must be addressed lest voices are excluded [33]. A great strength, and characteristic of the community care sector is that many organisations know each other well, or at the very least are aware of each other and know specific individuals working within other organisations (as was the case between our collaborators). Leveraging the affordances of digital systems such as ThoughtCloud, we might imagine new forms of ‘distributed consent giving’ where consent to share is agreed upon by several trusted parties in a network of care, perhaps even drawn from these other care organisations. However, as some individuals require secure partitioning of their identifying information within organisations potentially working simultaneously with dangerous individuals connected to them [50], such an approach would require great care in applying into practice.

IMPLICATIONS AND CONCLUSION

In this paper, we have presented a 12 week field trial of ThoughtCloud, a feedback collection platform, with four not-for-profit and community sector care organisations. We have built on our previous shorter studies of an earlier version of this system by studying how the ThoughtCloud system is used over an extended period of time, examining how the technology is incorporated into the existing work practices of these organisations and supports them in both collecting and responding to the feedback and opinion of their service users. Our findings highlighted that, despite there being a huge amount of value seen in the principles of feedback collection and the technology itself, structural issues around technological literacy and performance management in this sector limited the meaningfulness of ThoughtCloud’s use as a tool to support advocacy of service users. Our findings highlight how the design of future systems needs to:

- be designed to foster a culture of feedback where the value of ongoing collection is communicated to both those giving feedback (i.e., that it may influence future funding of services) and reviewing feedback (i.e., that it can be used to enable reflection on practice);
- hold organisations to account, feeding back their performance as feedback reviewers, and prompting them when feedback is waiting to be reviewed;
- make the practice of listening to service users visible to the wider community through publishing data related to, not just feedback collection, but also response rates and how it has shaped funding and service provision.

Despite the noted challenges, there are still clear opportunities for feedback technologies like ThoughtCloud to foster meaningful, direct participation with excluded groups. Our experience shows us, as has been demonstrated elsewhere [32], that funding driven feedback practices for accountability rather than learning effects the practices of organisations. New mechanisms to capture feedback by themselves are insufficient to overcome this challenge. In future the design challenge concerns, not just the configuration of systems like ThoughtCloud, but also how organisational performance management mechanisms are designed to include such systems, creating a culture of reflexivity and learning.

ACKNOWLEDGEMENTS

We’d like to thank SmartSkills, Young People First, Bright Times and Horizons (not their real names) as well as all of our participants for giving their time and support. This research was funded through the EPSRC CDT in Digital Civics (EP/L016176/1). Data supporting this publication is openly available under an ‘Open Data Commons Open Database License’. Additional metadata are available at: <http://dx.doi.org/10.17634/154300-38>. Please contact Newcastle Research Data Service at rdm@ncl.ac.uk for access instructions.

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